IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

PAR PHARMACEUTICAL, INC., ENDO PAR INNOVATION COMPANY, LLC, and PAR STERILE PRODUCTS, LLC, *Plaintiffs*, v. AMERICAN REGENT, INC. *Defendant*.	C.A. No. 1:19-cv-01490-CFC Filed Under Seal

DEFENDANT'S ANSWER, DEFENSES, AND COUNTERCLAIMS TO PLAINTIFFS' COMPLAINT FOR PATENT INFRINGEMENT

Defendant American Regent, Inc. ("ARI") hereby answers the Complaint (D.I. 1) brought by Plaintiffs Par Pharmaceutical, Inc., Endo Par Innovation Company, LLC, and Par Sterile Products, LLC (collectively, "Plaintiffs"). Additionally, ARI hereby asserts counterclaims for declaratory judgment of non-infringement of U.S. Patent Nos. 9,375,478 ("the '478 patent"); 9,687,526 ("the '526 patent"); 9,744,209 ("the '209 patent"); 9,750,785 ("the '785 patent"); and 9,744,239 ("the '239 patent") (collectively, "the Patents-in-Suit") and invalidity of the '478 patent, the '526 patent, the '209 patent, and the '785 patent. With respect to the allegations made in the Complaint, upon knowledge with respect to ARI's own acts, and upon information and belief as to other matters, ARI responds and alleges as follows:

GENERAL DENIAL

ARI denies all allegations in Plaintiffs' Complaint except for those specifically admitted below. With respect to the allegations made in the Complaint, upon knowledge with respect to ARI's own acts, and upon information and belief as to other matters, ARI responds and alleges as follows:

THE PARTIES

1. Plaintiff Par Pharmaceutical, Inc. ("Par Pharmaceutical") is a corporation organized and existing under the laws of the State of New York, having a principal place of business at 1 Ram Ridge Road, Chestnut Ridge, New York 10977. Par Pharmaceutical develops, manufactures, and markets pharmaceutical products in the United States.

ANSWER: ARI admits, upon information and belief, that Par Pharmaceutical is a corporation organized and existing under the laws of the State of Delaware, having a principal place of business at 1 Ram Ridge Road, Chestnut Ridge, New York 10977. ARI lacks knowledge or information sufficient to form a belief as to the truth of the remainder of Plaintiffs' allegations in paragraph 1 of the Complaint and on that basis denies them.

2. Plaintiff Par Sterile Products, LLC ("Par Sterile Products") is a limited liability company organized and existing under the laws of Delaware, having its principal place of business at 1 Ram Ridge Road, Chestnut Ridge, New York 10977. Par Sterile Products develops, manufactures, and markets injectable pharmaceutical products, and provides manufacturing services to the biopharmaceutical and pharmaceutical industry.

ANSWER: ARI admits, upon information and belief, that Par Sterile Products is a corporation organized and existing under the laws of the State of Delaware, having a principal place of business at 1 Ram Ridge Road, Chestnut Ridge, New York 10977. ARI lacks knowledge or information sufficient to form a belief as to the truth of the remainder of Plaintiffs' allegations in paragraph 2 of the Complaint and on that basis denies them.

3. Plaintiff Endo Par Innovation Company ("EPIC") is a limited liability company organized and existing under the laws of Delaware, having its principal place of business at 1 Ram Ridge Road, Chestnut Ridge, New York 10977.

ANSWER: ARI admits, upon information and belief, that EPIC is a corporation organized and existing under the laws of the State of Delaware, having a principal place of business at 1 Ram Ridge Road, Chestnut Ridge, New York 10977. ARI lacks knowledge or

information sufficient to form a belief as to the truth of the remainder of Plaintiffs' allegations in paragraph 1 of the Complaint and on that basis denies them.

4. Upon information and belief, American Regent, Inc. is a corporation organized and existing under the laws of New York, having its principal place of business at 5 Ramsey Road, Shirley, New York 11967. Upon information and belief, American Regent is a pharmaceutical company engaged in the research, development, production, distribution, and sale of generic pharmaceuticals throughout the United States, including sales within this judicial district.

ANSWER: Admitted.

NATURE OF THE ACTION

5. This is an action for infringement of United States Patent Nos. 9,375,478 ("the '478 Patent"), 9,687,526 ("the '526 Patent") 9,744,209 ("the '209 Patent"), and 9,750,785 ("the '785 Patent") (collectively, "the Patents-in-Suit"). This action is based upon the Patent Laws of the United States, 35 U.S.C. § 100, et seq.

ANSWER: ARI admits that this action purports to arise under the patent laws of the United States, Title 35, United States Code. The remaining allegations in paragraph 5 of the Complaint constitute conclusions of law to which no answer is required. To the extent that a response is required, ARI denies the remaining allegations in paragraph 5 of the Complaint.

JURISDICTION AND VENUE

6. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) (patent infringement).

ANSWER: ARI admits that this action purports to arise under the patent laws of the United States. The remaining allegations in paragraph 6 of the Complaint constitute conclusions of law to which no answer is required. To the extent an answer is required, ARI admits that this Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

7. This Court has personal jurisdiction over American Regent because, inter alia, American Regent has purposely availed itself of the benefits and protections of the laws of

Delaware. In addition, on information and belief, American Regent has had continuous and systematic contacts with this judicial district, including conducting business in Delaware and marketing, selling, and distributing pharmaceutical products throughout the United States and in this judicial district.

ANSWER: The allegations in paragraph 7 of the Complaint constitute conclusions of law to which no answer is required. To the extent that a response is required, ARI does not contest personal jurisdiction for the purpose of this matter only. ARI denies the remaining allegations in paragraph 7 of the Complaint.

8. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b) because, inter alia, American Regent has engaged in a course of conduct to seek approval for, manufacture, distribute, market, and sell the infringing products throughout the United States, including in this judicial district, and has agreed not to challenge venue in this district with respect to this lawsuit.

ANSWER: The allegations in paragraph 8 of the Complaint constitute conclusions of law to which no answer is required. To the extent that a response is required, ARI does not contest venue for purposes of this matter only. ARI denies the remaining allegations in paragraph 8 of the Complaint.

THE DRUG APPROVAL PROCESS

9. A company seeking to market a new pharmaceutical drug in the United States must first obtain approval from the U.S. Food and Drug Administration ("FDA"), typically through the filing of a New Drug Application ("NDA"). *See* 21 U.S.C. § 355(a). The sponsor of the NDA is required to submit to FDA information on all patents claiming the drug that is the subject of the NDA, or a method of using that drug, and FDA then lists the patent information in its publication, the *Approved Drug Products with Therapeutic Equivalence Evaluations*, which is referred to as the "Orange Book." *See* 21 U.S.C. § 355(b)(1) and (c)(2).

ANSWER: The allegations in paragraph 9 of the Complaint constitute conclusions of law to which no answer is required.

10. Alternatively, a company may seek approval to market a new drug product by filing an NDA under 21 U.S.C. § 355(b)(2) (a "§ 505(b)(2) application") which refers to and relies in part on the safety and efficacy findings of a previously approved drug (referred to as a

"reference listed drug"), typically one that was approved under an original NDA filed pursuant to 21 U.S.C. § 355(b)(1).

ANSWER: The allegations in paragraph 10 of the Complaint constitute conclusions of law to which no answer is required.

11. By allowing an applicant to piggy-back on the innovator company's investment in clinical or other studies relating to the previously approved, reference listed drug, the abbreviated § 505(b)(2) application process can provide a shorter and less costly drug development pathway for the applicant than exists for an applicant filing an original NDA.

ANSWER: The allegations of paragraph 11 of the Complaint constitute conclusions of law to which no answer is required.

12. In conjunction with this § 505(b)(2) application process, Congress has put in place a process for resolving patent disputes relating to § 505(b)(2) application products, pursuant to which a § 505(b)(2) applicant must provide certifications addressing each of the patents listed in the Orange Book for the reference listed drug. See 21 U.S.C. § 355(b)(2)(A). *See also* 21 C.F.R. §§ 314.50(i), 314.54. The applicant may certify, for instance, that it believes a patent is invalid or will not be infringed by the manufacture, use, or sale of the § 505(b)(2) application product. *See* 21 U.S.C. §355(b)(2)(A)(iv); 21 C.F.R. § 314.50(i)(1)(i)(A)(4). This is known as a "Paragraph IV Certification."

ANSWER: The allegations of paragraph 12 of the Complaint constitute conclusions of law to which no answer is required.

13. A § 505(b)(2) applicant that includes a Paragraph IV Certification with its application must also provide notice to both the owners of the listed patents and the holder of the NDA for the referenced listed drug. This "Paragraph IV Notice" must include a detailed statement of the factual and legal bases supporting the § 505(b)(2) applicant's belief that the challenged patent is invalid or not infringed by the proposed § 505(b)(2) application product. See 21 U.S.C. § 355(b)(3); 21 C.F.R. § 314.52.

ANSWER: The allegations of paragraph 13 of the Complaint constitute conclusions of law to which no answer is required.

14. If the patentee or NDA holder files a patent infringement action within 45 days of receiving a Paragraph IV Notice from a § 505(b)(2) applicant, final approval of the § 505(b)(2) application is subject to a 30-month stay. See 21 U.S.C. § 355(c)(3)(C). The 30-month stay is important to the innovator companies because it protects them from the severe financial harm

that could otherwise ensue from the FDA granting approval to an infringing product without first providing an opportunity for the infringement case to be resolved. Put another way, the innovator company is assured of a 30-month period during which it may try to enforce its intellectual property rights and resolve any patent dispute before the § 505(b)(2) application product enters the market. See 21 U.S.C. § 355(c)(3)(C).

ANSWER: The allegations of paragraph 14 of the Complaint regarding the application of a 30-month stay if a patentee or NDA holder files a patent infringement action within 45 days of receiving the Paragraph IV Notice constitute conclusions of law to which no answer is required. ARI denies the remaining allegations in paragraph 14 of the Complaint.

FACTUAL BACKGROUND

15. On June 28, 2016, the PTO duly and legally issued the '478 Patent, entitled "Vasopressin Formulations For Use In Treatment of Hypotension," to Par Pharmaceutical as assignee. A true and correct copy of the '478 Patent is attached as Exhibit A. Par Pharmaceutical owns the '478 Patent.

ANSWER: ARI admits that Exhibit A purports to be a copy of the '478 patent. ARI admits that the '478 patent purports to be entitled "Vasopressin Formulations for Use In Treatment of Hypotension." ARI lacks knowledge or information sufficient to form a belief as to the truth of the remainder of Plaintiffs' allegations and on that basis denies them.

16. On June 27, 2017, the PTO duly and legally issued the '526 Patent, entitled "Vasopressin Formulations For Use In Treatment of Hypotension," to Par Pharmaceutical as assignee. A true and correct copy of the '526 Patent is attached as Exhibit B. Par Pharmaceutical owns the '526 Patent.

ANSWER: ARI admits that Exhibit B purports to be a copy of the '526 patent. ARI admits that the'526 patent purports to be entitled "Vasopressin Formulations for Use In Treatment of Hypotension." ARI lacks knowledge or information sufficient to form a belief as to the truth of the remainder of Plaintiffs' allegations and on that basis denies them.

17. On August 29, 2017, the PTO duly and legally issued the '209 Patent, entitled "Vasopressin Formulations For Use In Treatment of Hypotension," to Par Pharmaceutical as

assignee. A true and correct copy of the '209 Patent is attached as Exhibit C. Par Pharmaceutical owns the '209 Patent.

ANSWER: ARI admits that Exhibit C purports to be a copy of the '209 patent. ARI admits that the'209 patent purports to be entitled "Vasopressin Formulations for Use In Treatment of Hypotension." ARI lacks knowledge or information sufficient to form a belief as to the truth of the remainder of Plaintiffs' allegations and on that basis denies them.

18. On September 5, 2017, the PTO duly and legally issued the '785 Patent, entitled "Vasopressin Formulations For Use In Treatment Of Hypotension," to Par Pharmaceutical as assignee. A true and correct copy of the '785 Patent is attached as Exhibit D. Par Pharmaceutical owns the '785 Patent.

ANSWER: ARI admits that Exhibit D purports to be a copy of the '785 patent. ARI admits that the'785 patent purports to be entitled "Vasopressin Formulations for Use In Treatment of Hypotension." ARI lacks knowledge or information sufficient to form a belief as to the truth of the remainder of Plaintiffs' allegations and on that basis denies them.

19. EPIC is the exclusive licensee of the Patents-In-Suit.

ANSWER: ARI lacks knowledge or information sufficient to form a belief as to the truth of Plaintiffs' allegations in paragraph 19 of the Complaint and on that basis denies them.

VASOSTRICT

20. Vasopressin, the active ingredient in VASOSTRICT® (described below), is a polypeptide hormone that causes contraction of vascular and other smooth muscle cells. VASOSTRICT® is a lifesaving drug often used when the blood pressure of a critical care patient drops precipitously.

ANSWER: ARI lacks knowledge or information sufficient to form a belief as to the truth of Plaintiffs' allegations in paragraph 20 of the Complaint and on that basis denies them.

21. On September 25, 2012, JHP Pharmaceuticals ("JHP") submitted NDA No. 204485, under §505(b)(2) of the Federal Food, Drug, and Cosmetic Act (FDCA) seeking FDA approval for a vasopressin injection product to increase blood pressure in adults with

vasodilatory shock. On April 17, 2014, the FDA approved NDA 204485 as the first FDA-approved vasopressin injection product for use in a clinical setting in the United States.

ANSWER: The allegations in paragraph 21 of the Complaint constitute conclusions of law to which no answer is required. To the extent a response is required, ARI lacks knowledge or information sufficient to form a belief as to the truth of Plaintiffs' allegations in paragraph 21 of the Complaint and on that basis denies them.

22. On February 20, 2014, Par Pharmaceutical Companies, Inc. acquired JHP Pharmaceuticals, LLC. On February 26, 2014, JHP Pharmaceuticals, LLC changed its name to Par Sterile Products, LLC.

ANSWER: Admitted.

23. Par Sterile Products submitted supplemental NDAs including supplemental NDA Nos. 204485/S-003 and 204485/S-004 for the current formulations of VASOSTRICT®—20 units/mL in 1 mL vials and 200 units/10 mL in 10 mL multi-dose vials. On March 18, 2016, the FDA approved NDA No. 204485/S-003 for the 20 units/mL in 1 mL vial formulation of VASOSTRICT®. On December 17, 2016, the FDA approved NDA No. 204485/S-004 for the 200 units/10 mL in 10mL vial formulation of VASOSTRICT®.

ANSWER: The allegations in paragraph 23 of the Complaint constitute conclusions of law to which no answer is required. To the extent a response is required, ARI lacks knowledge or information sufficient to form a belief as to the truth of Plaintiffs' allegations in paragraph 23 of the Complaint and on that basis denies them.

24. Par Sterile Products is the holder of NDA 204485, including all supplements thereto, for VASOSTRICT®.

ANSWER: ARI admits that the FDA's website indicates that Par Sterile Products holds NDA No. 204-485 for VASOTRICT®. ARI lacks knowledge or information sufficient to form a belief about the truth of Par Sterile Products' remaining allegations in paragraph 24 of the Complaint and therefore denies them.

25. Par timely submitted information regarding the Patents-in-Suit for listing in the "Orange Book" with respect to VASOSTRICT®, pursuant to 21 U.S.C. § 355(b)(1) and (c)(2). The FDA thereafter listed the Patents-in-Suit in the Orange Book, pursuant to 21 C.F.R. § 314.53(e).

ANSWER: ARI lacks knowledge or information sufficient to form a belief as to the truth of Plaintiffs' allegations in paragraph 25 of the Complaint and on that basis denies them.

26. VASOSTRICT® is FDA-approved as indicated to increase blood pressure in adults with vasodilatory shock (e.g., post-cardiotomy or sepsis) who remain hypotensive despite fluids and catecholamines. Par markets and sells its VASOSTRICT® products to hospitals, both directly and via group purchasing organizations and wholesalers. VASOSTRICT® has enjoyed tremendous commercial success, with 2017 annual sales of $400 million.

ANSWER: ARI admits that VASOSTRICT®'s label states that "Vasostrict is indicated to increase blood pressure in adults with vasodilatory shock (e.g., post-cardiotomy or sepsis) who remain hypotensive despite fluids and catecholamines." ARI lacks knowledge or information sufficient to form a belief as to the truth of Plaintiffs' remaining allegations in paragraph 26 of the Complaint and on that basis denies them.

27. Upon information and belief, American Regent has submitted NDA No. 212593 (the "American Regent NDA") to the FDA pursuant to 35 U.S.C. § 355(b)(2), seeking approval to engage in the commercial manufacture, use, and sale of a proposed Vasopressin Injection USP, 20 units/1 mL (20 units/mL) product, referencing Par's VASOSTRICT® products as the reference listed drug (the "Proposed NDA Product").

ANSWER: ARI admits that it submitted NDA No. 212593 to the FDA seeking approval to engage in the commercial manufacture, use, or sale of the formulation described in NDA No. 212593. ARI denies the remaining allegations in paragraph 27 of the Complaint.

28. On or about June 27, 2019, American Regent sent Par Sterile Products and Par Pharmaceutical a notice stating that American Regent had submitted the American Regent NDA seeking approval to manufacture, use, or sell the Proposed NDA Product prior to expiration of the Patents-in-Suit (the "Paragraph IV Notice").

ANSWER: ARI admits that ARI sent written notice of its NDA and its Paragraph IV Notice to Par Pharmaceutical and Par Sterile Products by letter dated June 27, 2019. ARI denies the remaining allegations in paragraph 28 of the Complaint.

29. The Paragraph IV Notice advised that American Regent's NDA includes Paragraph IV Certifications stating that it is American Regent's opinion that the Patents-in-Suit are invalid and not infringed by the Proposed NDA Product.

ANSWER: ARI admits that its Paragraph IV Notice Letter stated that the patents-in-suit are invalid and/or not infringed.

30. Upon information and belief, if American Regent were to obtain FDA approval to market and sell its Proposed NDA Product, it would market and sell them throughout the United States, including in this District.

ANSWER: ARI admits only that, if FDA approves NDA No. 212593, ARI would take all legal actions permitted to it by FDA's approval.

COUNT I: INFRINGEMENT OF THE '526 PATENT

31. Par incorporates each of the preceding paragraphs as if fully set forth herein.

ANSWER: In response to paragraph 31 of the Complaint, ARI incorporates by reference paragraphs 1 through 30 of this answer as if fully set forth herein.

32. American Regent's submission of the American Regent NDA to the FDA, including the Paragraph IV Certifications submitted therewith, which seeks approval to engage in the commercial manufacture, use, and sale of its Proposed NDA Product prior to the expiration of the '526 Patent, constitutes infringement of the '526 Patent under 35 U.S.C. § 271(e)(2)(A).

ANSWER: Denied.

33. Any commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product before expiration of the '526 patent would lead to direct infringement, contributory infringement, and/or active inducement of infringement of the '526 Patent under 35 U.S.C. §§ 271(a)-(c).

ANSWER: Denied.

34. In particular, and among other things, the commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product would lead to such infringement of at least claim 1 of the '526 Patent, which recites as follows:

> Claim 1: A method of increasing blood pressure in a human in need thereof, the method comprising:
>
> a) providing a pharmaceutical composition for intravenous administration comprising: i) from about 0.01 mg/mL to about 0.07 mg/mL of vasopressin or a pharmaceutically-acceptable salt thereof; ii) acetic acid; and iii) water,
> wherein the pharmaceutical composition has a pH of 3.8;
> b) storing the pharmaceutical composition at 2-8º C. for at least 4 weeks; and c) intravenously administering the pharmaceutical composition to the human, wherein the administration provides to the human from about 0.01 units of vasopressin or the pharmaceutically-acceptable salt thereof per minute to about 0.1 units of vasopressin or the pharmaceutically-acceptable salt thereof per minute,
>
> wherein the human is hypotensive,
>
> wherein the pharmaceutical composition exhibits less than about 5% degradation after storage at 2-8º C. for about four weeks.

ANSWER: Denied.

35. If the Proposed NDA Product is administered as intended, doctors, nurses and/or other medical personnel would perform each and every step of the method of treatment recited in claim 1. By virtue of its proposed product label and other conduct, American Regent would actively and intentionally induce such infringement.

ANSWER: Denied.

36. Any launch by American Regent of its Proposed NDA Product before expiration of the '526 Patent would cause Par to suffer immediate and irreparable harm.

ANSWER: Denied.

37. Upon information and belief, American Regent was aware of the existence of the '526 Patent, and is aware that the commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product will lead to infringement of the '526 Patent.

ANSWER: ARI admits that it was aware of the '526 patent before Plaintiffs filed the instant action. ARI denies the remaining allegations in paragraph 37 of the Complaint.

38. American Regent's infringement of the '526 Patent is willful.

ANSWER: Denied.

COUNT II: INFRINGEMENT OF THE '209 PATENT

39. Par incorporates each of the preceding paragraphs as if fully set forth herein.

ANSWER: In response to paragraph 39 of the Complaint, ARI incorporates by reference paragraphs 1 through 38 of this answer as if fully set forth herein.

40. American Regent's submission of the American Regent NDA to the FDA, including the Paragraph IV Certifications submitted therewith, which seeks approval to engage in the commercial manufacture, use, and sale of its Proposed NDA Product prior to the expiration of the '209 Patent, constitutes infringement of the '209 Patent under 35 U.S.C. § 271(e)(2)(A).

ANSWER: Denied.

41. Any commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product before expiration of the '209 patent would lead to direct infringement, contributory infringement, and/or active inducement of infringement of the '209 Patent under 35 U.S.C. §§ 271(a)-(c).

ANSWER: Denied.

42. In particular, and among other things, the commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product would lead to such infringement of at least claim 1 of the '209 Patent, which recites as follows:

> Claim 1: A method of increasing blood pressure in a human in need thereof, the method comprising administering to the human a unit dosage form, wherein the unit dosage form comprises from about 0.01 mg/mL to about 0.07 mg/mL of vasopressin or a pharmaceutically acceptable salt thereof; wherein:
>
> the unit dosage form has a pH of 3.7-3.9;
>
> the unit dosage form further comprises impurities that are present in an amount of 0.9% - 1.7%, wherein the impurities have from about 85% to about 100% sequence homology to SEQ ID NO.: 1;
>
> the administration provides to the human from about 0.01 units of vasopressin or the pharmaceutically-acceptable salt thereof per minute to about 0.1 units of vasopressin or the pharmaceutically-acceptable salt thereof per minute; and
>
> the human is hypotensive.

ANSWER: Denied.

43. If the Proposed NDA Product is administered as intended, doctors, nurses and/or other medical personnel would perform each and every step of the method of treatment recited in claim 1. By virtue of its proposed product label and other conduct, American Regent would actively and intentionally induce such infringement.

ANSWER: Denied.

44. Any launch by American Regent of its Proposed NDA Product before expiration of the '209 Patent would cause Par to suffer immediate and irreparable harm.

ANSWER: Denied.

45. Upon information and belief, American Regent was aware of the existence of the '209 Patent, and is aware that the commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product will lead to infringement of the '209 Patent.

ANSWER: ARI admits that it was aware of the '209 patent before Plaintiffs filed the instant action. ARI denies the remaining allegations in paragraph 45 of the Complaint.

46. American Regent's infringement of the '209 Patent is willful.

ANSWER: Denied.

COUNT III: INFRINGEMENT OF THE '478 PATENT

47. Par incorporates each of the preceding paragraphs as if fully set forth herein.

ANSWER: In response to paragraph 47 of the Complaint, ARI incorporates by reference paragraphs 1 through 46 of this answer as if fully set forth herein.

48. American Regent's submission of the American Regent NDA to the FDA, including the Paragraph IV Certifications submitted therewith, which seeks approval to engage in the commercial manufacture, use, and sale of its Proposed NDA Product prior to the expiration of the '478 Patent, constitutes infringement of the '478 Patent under 35 U.S.C. § 271(e)(2)(A).

ANSWER: Denied.

49. Any commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product before expiration of the '478 patent would lead to direct infringement, contributory infringement, and/or active inducement of infringement of the '478 Patent under 35 U.S.C. §§ 271(a)-(c).

ANSWER: Denied.

50. In particular, and among other things, the commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product would lead to such infringement of at least claim 1 of the '478 Patent, which recites as follows:

> Claim 1: A method of increasing blood pressure in a human in need thereof, the method comprising administering to the human a unit dosage form, wherein the unit dosage form consists essentially of:
>
> a) from about .01 mg/mL to about .07 mg/mL of vasopressin or a pharmaceutically-acceptable salt thereof;
>
> b) 10 mM acetate buffer; and
>
> c) water,
>
> wherein:
>
> the unit dosage form has a pH of 3.8;
>
> the administration provides to the human from about 0.01 units of vasopressin or the pharmaceutically-acceptable salt thereof per minute to about 0.1 units of vasopressin or the pharmaceutically-acceptable salt thereof per minute; and
>
> the human is hypotensive.

ANSWER: Denied.

51. If the Proposed NDA Product is administered as intended, doctors, nurses and/or other medical personnel would perform each and every step of the method of treatment recited in claim 1. By virtue of its proposed product label and other conduct, American Regent would actively and intentionally induce such infringement.

ANSWER: Denied.

52. Any launch by American Regent of its Proposed NDA Product before expiration of the '478 Patent would cause Par to suffer immediate and irreparable harm.

ANSWER: Denied.

53. Upon information and belief, American Regent was aware of the existence of the '478 Patent, and is aware that the commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product infringes the '478 Patent.

ANSWER: ARI admits that it was aware of the '478 patent before Plaintiffs filed the instant action. ARI denies the remaining allegations in paragraph 53 of the Complaint.

54. American Regent's infringement of the '478 Patent is willful.

ANSWER: Denied.

COUNT IV: INFRINGEMENT OF THE '785 PATENT

55. Par incorporates each of the preceding paragraphs as if fully set forth herein.

ANSWER: In response to paragraph 55 of the Complaint, ARI incorporates by reference paragraphs 1 through 54 of this answer as if fully set forth herein.

56. American Regent's submission of the American Regent NDA to the FDA, including the Paragraph IV Certifications submitted therewith, which seeks approval to engage in the commercial manufacture, use, and sale of its Proposed NDA Product prior to the expiration of the '785 Patent, constitutes infringement of the '785 Patent under 35 U.S.C. § 271(e)(2)(A).

ANSWER: Denied.

57. Any commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product before expiration of the '785 patent would lead to direct infringement, contributory infringement, and/or active inducement of infringement of the '785 Patent under 35 U.S.C. §§ 271(a)-(c).

ANSWER: Denied.

58. In particular, and among other things, the commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product would lead to such infringement of at least claim 1 of the '785 Patent, which recites as follows:

> Claim 1: A pharmaceutical composition comprising, in a unit dosage form, from about 0.01 mg/mL to about 0.07 mg/mL of vasopressin or a pharmaceutically-acceptable salt thereof, wherein the unit dosage form further comprises impurities that are present in an amount of 0.9% to 1.7%; wherein the impurities have from about 85% to about 100% sequence homology to SEQ ID NO.: 1, and wherein the unit dosage form has a pH of 3.7-3.9.

ANSWER: Denied.

59. The Proposed NDA Product satisfies each of the elements of the pharmaceutical composition recited in claim 1, such that the commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product by American Regent would constitute infringement of claim 1 of the '785 Patent.

ANSWER: Denied.

60. Any launch by American Regent of its Proposed NDA Product before expiration of the '785 Patent would cause Par to suffer immediate and irreparable harm.

ANSWER: Denied.

61. Upon information and belief, American Regent was aware of the existence of the '785 Patent, and is aware that the commercial manufacture, use, offer for sale, sale, and/or importation into the United States of the Proposed NDA Product infringes the '785 Patent.

ANSWER: ARI admits that it was aware of the '785 patent before Plaintiffs filed the instant action. ARI denies the remaining allegations in paragraph 61 of the Complaint.

62. American Regent's infringement of the '785 Patent is willful.

ANSWER: Denied.

PRAYER FOR RELIEF

Defendant denies that Plaintiffs are entitled to any of the requested relief or any other relief. Each averment and/or allegation contained in Plaintiffs' Complaint that is not specifically admitted herein is hereby denied.

DEFENSES

Without prejudice to the denials set forth in its Answer to the Complaint, and without admitting any allegations of the Complaint not otherwise admitted, Defendant asserts the following separate defenses to the Complaint:

FIRST DEFENSE

(Failure to State a Claim)

Plaintiffs fail to state a claim upon which relief can be granted.

SECOND DEFENSE

(Noninfringement of the '785 Patent)

ARI has not infringed, directly or indirectly, any valid claim of the '785 Patent, and is not liable for any infringement thereof.

THIRD DEFENSE

(Noninfringement of the '478 Patent)

ARI has not infringed, directly or indirectly, any valid claim of the '478 Patent, and is not liable for any infringement thereof.

FOURTH DEFENSE

(Noninfringement of the '209 Patent)

ARI has not infringed, directly or indirectly, any valid claim of the '209 Patent, and is not liable for any infringement thereof.

FIFTH DEFENSE

(Noninfringement of the '526 Patent)

ARI has not infringed, directly or indirectly, any valid claim of the '526 Patent, and is not liable for any infringement thereof.

SIXTH DEFENSE

(Invalidity of the '785 Patent)

The '785 Patent is invalid for failure to satisfy one or more of the conditions for patentability under the patent laws of the United States, including, without limitation, 35 U.S.C. §§ 101, 102, 103, and/or 112 and/or obviousness-type double patenting.

SEVENTH DEFENSE

(Invalidity of the '478 Patent)

The ’478 Patent is invalid for failure to satisfy one or more of the conditions for patentability under the patent laws of the United States, including, without limitation, 35 U.S.C. §§ 101, 102, 103, and/or 112 and/or obviousness-type double patenting.

EIGHTH DEFENSE

(Invalidity of the ’209 Patent)

The ’209 Patent is invalid for failure to satisfy one or more of the conditions for patentability under the patent laws of the United States, including, without limitation, 35 U.S.C. §§ 101, 102, 103, and/or 112 and/or obviousness-type double patenting.

NINTH DEFENSE

(Invalidity of the ’526 Patent)

The ’526 Patent is invalid for failure to satisfy one or more of the conditions for patentability under the patent laws of the United States, including, without limitation, 35 U.S.C. §§ 101, 102, 103, and/or 112 and/or obviousness-type double patenting.

TENTH DEFENSE

(Inequitable Conduct and Unclean Hands)

Plaintiffs’ claims based on the patents-in-suit are barred because one of more of Plaintiffs, the named inventors on those patents, their attorneys, representatives, predecessors in interest, and/or other persons with a duty of candor to the PTO has unclean hands on account of violations of the duty of candor to the PTO and misrepresentation of material facts to the PTO. The factual basis of the allegations in this paragraph is described below in ARI’s counterclaims, which are incorporated herein by reference.

RESERVATION OF DEFENSES

ARI reserves the right to assert additional defenses as may be warranted by discovery or further factual investigation in this action.

ARI'S COUNTERCLAIMS

Defendant and Counterclaim Plaintiff American Regent, Inc. ("ARI") asserts the following counterclaims against Plaintiffs and Counterclaim Defendants Par Pharmaceutical, Inc. ("Par Pharmaceutical"); Par Sterile Products, LLC ("Par Sterile Products"); and Endo Par Innovation Company ("EPIC") (collectively, "Plaintiffs").

NATURE OF THE ACTION

1. This counterclaim includes a claim for a declaratory judgment that U.S. Patent Nos. 9,375,478 ("the '478 patent"); 9,687,526 ("the '526 patent"); 9,744,209 ("the '209 patent"); 9,750,785 ("the '785 patent"); and 9,744,239 ("the '239 patent") (collectively the "patents-in-suit") are not infringed and that the '478 patent, the '526 patent, the '209 patent, and the '785 patent are invalid.

THE PARTIES

2. American Regent, Inc. is a corporation organized and existing under the laws of New York, having its principal place of business at 5 Ramsey Road, Shirley, New York 11967.

3. Upon information and belief, Counterclaim Defendant Par Pharmaceutical is a corporation organized and existing under the laws of the State of New York, having a principal place of business at 1 Ram Ridge Road, Chestnut Ridge, New York 10977.

4. Upon information and belief, Counterclaim Defendant Par Sterile Products is a limited liability company organized and existing under the laws of Delaware, having its principal place of business at 1 Ram Ridge Road, Chestnut Ridge, New York 10977.

5. Upon information and belief, Counterclaim Defendant EPIC is a limited liability company organized and existing under the laws of Delaware, having its principal place of business at 1 Ram Ridge Road, Chestnut Ridge, New York 10977.

6. Each of Par Pharmaceutical, Par Sterile Products, and EPIC are a plaintiff in the underlying action and contend that ARI infringes the ’478 patent, the ’526 patent, the ’209 patent, and the ’785 patent. Plaintiffs are the owners, assignees, or licensees of the ’239 patent. Plaintiffs contend that the patents-in-suit are valid and enforceable.

JURISDICTION AND VENUE

7. This is an action seeking a declaration of non-infringement and unenforceability with respect to the patents-in-suit pursuant to 28 U.S.C. §§ 2201 and 2202, the Hatch-Waxman Act, 21 U.S.C. §§ 355(j) *et seq.*, and the patent laws of the United States of America, 35 U.S.C. § 1 *et seq*. ARI further seeks a declaratory judgment that the ’478 patent, the ’526 patent, the ’209 patent, and the ’785 patent are invalid.

8. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action involves substantial claims arising under the United States Patent Act (35 U.S.C. §§ 1 *et seq.*), the Declaratory Judgment Act (28 U.S.C. §§ 2201-2202), 21 U.S.C. § 355(j)(5)(C), and 35 U.S.C. § 271(e)(5).

9. This Court has personal jurisdiction over Plaintiffs by virtue of, *inter alia*, Plaintiffs’ conducting business inside the state of Delaware, subjecting itself to the jurisdiction of this Court by filing the underlying action, and availing itself to the rights and benefits of Delaware law.

10. ARI contends that it has a right to engage in making, using, offering for sale, and selling the products described in ARI's NDA No. 212593 without license from Plaintiffs.

11. Venue is proper in this district because the counterclaims arise from facts and circumstances alleged in Plaintiffs' Complaint against ARI filed in this District.

BACKGROUND

12. The '209 patent is titled "Vasopressin Formulations for Use in Treatment of Hypotension" and states that it was issued on August 29, 2017.

13. The '785 patent is titled "Vasopressin Formulations for Use in Treatment of Hypotension" and states that it was issued on September 5, 2017.

14. The '478 patent is titled "Vasopressin Formulations for Use in Treatment of Hypotension" and states that it was issued on June 28, 2016.

15. The '526 patent is titled "Vasopressin Formulations for Use in Treatment of Hypotension" and states that it was issued on June 27, 2017.

16. The '239 patent is titled "Vasopressin Formulations for Use in Treatment of Hypotension" and states that it was issued on August 29, 2017. A true and correct copy of the '239 patent is attached as Exhibit A.

17. The '209, '785, '478, '526, and '239 patents are listed in Approved Drug Products with Therapeutic Evaluations ("the Orange Book") for New Drug Application ("NDA") No. 204485/S-003 for Vasopressin Injection USP, 20 units/mL in 1 mL vials, which are marketed in the United States under the trade name VASOSTRICT®.

18. The Hatch-Waxman Act encourages prompt resolution of patent disputes by authorizing a patent owner to sue an applicant for patent infringement if a Paragraph IV

certification has been made. *See* 35 U.S.C. § 271(e)(2). By statute, if the patent owner brings suit within 45-days of receiving notice of the Paragraph IV certification, the suit will trigger an automatic statutory 30-month stay of approval by the FDA of the 505(b)(2) applicant or ANDA applicant to allow parties time to adjudicate the merits of the infringement action before the applicant launches its product. *See* 21 U.S.C. § 355(c)(3)(C).

19. As part of the statute, the Hatch-Waxman Act allows NDA applicants to bring declaratory-judgment actions asserting noninfringement against any relevant Orange-Book-listed patent if (1) neither the patent owner nor the NDA holder brought an action for infringement of the patent within the 45-day period; and (2) the applicant's notice of paragraph IV certification included an offer of confidential access to the application. 21 U.S.C. § 355(c)(3)(D).

20. On June 27, 2019, ARI sent notice of submission of a Paragraph IV certification to Plaintiffs via Federal Express certifying that ARI's submission of NDA No. 212593 would not infringe any valid or enforceable claim of the patents listed in the Orange Book for VASOSTRICT®.

21. Plaintiffs received a copy of ARI's Paragraph IV Notice Letter on or about June 28, 2019.

22. ARI's Paragraph IV Notice Letter contained an offer for confidential access pursuant to 21 U.S.C. 355(c)(3)(D)(i)(III), and ARI and Plaintiffs entered into an agreement, providing Plaintiff confidential access to ARI's NDA No. 212593.

23. On August 9, 2019, Plaintiffs filed a Complaint against ARI alleging infringement of the '478 patent, the '526 patent, the '209 patent, and the '785 patent. ARI has

denied that it infringes any valid and enforceable claim of the ’478 patent, the ’526 patent, the ’209 patent, and the ’785 patent.

24. Plaintiffs chose not to sue ARI on the ’239 patent, which is listed in the Orange Book for VASOSTRICT®, though Plaintiffs had the opportunity to do so.

25. Due to the foregoing, an actual controversy exists between ARI and Plaintiffs by virtue of Plaintiffs’ listing of the ’239 patent in the Orange Book for VASOSTRICT®. ARI’s submission of NDA No. 212593 to market bioequivalent vasopressin products and Plaintiffs’ failure to bring suit against ARI in connection with ARI’s submission of NDA No. 212593 or any product described therein confers jurisdiction.

FIRST COUNTERCLAIM:

DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE ’785 PATENT

26. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

27. ARI has not and will not infringe any valid and enforceable claim of the ’785 patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI’s NDA No. 212593 does not meet all the limitations of any valid and enforceable claim of the ’785 patent.

28. For example, and in no way intended as a limitation, claim 2 of the ’785 patent recites that the HPLC test for vasopressin degradation products include a “first mobile phase” that is “phosphate buffer at pH 3,” a “second mobile phase” that is “a 50-50 acetonitrile:water solution,” or “running the unit dosage form through the chromatography column for 55 minutes.”

29. ARI's [redacted] As a result, ARI does not infringe, at least, claim 2 of the '785 patent.

30. ARI is entitled to a judgment declaring that ARI has not infringed any asserted claim of the '785 Patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI's NDA No. 212593 would not infringe any valid and enforceable claim of the '785 patent, either literally or under the doctrine of equivalents.

31. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities as the Court deems applicable.

SECOND COUNTERCLAIM:

DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '209 PATENT

32. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

33. ARI has not and will not infringe any valid and enforceable claim of the '209 patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI's NDA No. 212593 does not meet all the limitations of any valid and enforceable claim of the '209 patent.

34. For example, and in no way intended as a limitation, claim 11 of the '209 patent recites that the HPLC test for vasopressin degradation products include a "first mobile phase" that is "phosphate buffer at pH 3," a "second mobile phase" that is "a 50-50 acetonitrile:water solution," or "running the unit dosage form through the chromatography column for 55 minutes."

35. ARI's [redacted] As a result, ARI does not infringe, at least, claim 11 of the '239 patent.

36. ARI is entitled to a judgment declaring that ARI has not infringed any asserted claim of the '209 patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI's NDA No. 212593 would not infringe any valid and enforceable claim of the '209 Patent, either literally or under the doctrine of equivalents.

37. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities as the Court deems applicable.

THIRD COUNTERCLAIM:

DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '478 PATENT

38. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

39. ARI has not and will not infringe any valid and enforceable claim of the '478 patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI's NDA No. 212593 does not meet all the limitations of any valid and enforceable claim of the '478 patent.

40. Independent claim 1 of the '478 patent defines a dosage form having a "10 mM acetate buffer." The Court construed this phrase to mean "[a] solution containing a mixture of acetic acid and acetate, with a total concentration of 10 mM, that is capable of resisting change in pH upon the addition of acidic or basic substances." *See* D.I. 1-1, Claim 1.

41. ARI's proposed NDA product does not infringe independent claim 1, and thus all dependent claims in the '478 patent, because, at least, ARI' [redacted]

42. ARI is entitled to a judgment declaring that ARI has not infringed any asserted claim of the '478 patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI's NDA No. 212593 would not infringe any valid and enforceable claim of the '478 patent, either literally or under the doctrine of equivalents.

43. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities as the Court deems applicable.

FOURTH COUNTERCLAIM:
DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '526 PATENT

44. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

45. ARI has not and will not infringe any valid and enforceable claim of the ’526 patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI’s NDA No. 212593 does not meet all the limitations of any valid and enforceable claim of the ’526 patent.

46. ARI is entitled to a judgment declaring that ARI has not infringed any asserted claim of the ’526 patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI’s NDA No. 212593 would not infringe any valid and enforceable claim of the ’526 patent, either literally or under the doctrine of equivalents.

47. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities as the Court deems applicable.

FIFTH COUNTERCLAIM:
DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE ’239 PATENT

48. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

49. ARI has not and will not infringe any valid and enforceable claim of the ’239 patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI’s NDA No. 212593 does not meet all the limitations of any valid and enforceable claim of the ’239 patent.

50. ARI is entitled to a judgment declaring that ARI has not infringed any asserted claim of the ’239 patent, either literally or under the doctrine of equivalents, and the commercial manufacture, use, offer for sale, sale, or importation of the product described in ARI’s NDA No. 212593 would not infringe any valid and enforceable claim of the ’239 patent, either literally or under the doctrine of equivalents. Independent claims 1 and 15 of the ’239 patent, and thus each of dependent claims 2–14 and 16–19, include the transitional phrase “consisting of” to define a pharmaceutical composition “consisting of” vasopressin, chlorobutanol, acetic acid or acetic acetate, 0-2% vasopressin degradation products, and water.

51. During prosecution of the ’239 patent, Plaintiffs amended the claims to substitute the “comprising” language with the narrower “consisting of” language to overcome an obviousness rejection. *See* Exhibit B ’239 Patent Prosecution History, May 22, 2017 Claims at 2. Any attempt by Plaintiffs to recapture claim scope would be prohibited under the doctrine of prosecution history estoppel.

52. The claims of the ’239 patent are necessarily limited by virtue of the use of the “consisting of” language. *See Norton Corp. v. Stryker Corp.*, 363 F.3d 1321, 1331–32 (Fed. Cir. 2004).

53. ARI’s proposed NDA product, [redacted], does not meet each claim limitation in Claims 1 and/or 15 of the ’239 patent because the ingredients of the product described in American Regent’s NDA No. 212593 [redacted]

54. ARI's proposed NDA product, as described in [redacted], does not meet each claim limitation in Claims 1 and/or 15 of the '239 patent because [redacted] claimed by the '239 patent.

55. The commercial manufacture, use, sale, offer for sale, or importation of the product described in NDA No. 212593 would not infringe any valid and enforceable claim of the '239 patent.

56. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities as the Court deems applicable.

SIXTH COUNTERCLAIM:
DECLARATORY JUDGMENT OF INVALIDITY OF THE '478 PATENT

57. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

58. Each of the claims of the '478 patent is invalid for failure to comply with one or more requirements of 35 U.S.C. §§ 101, 102, 103, or 112 and the rules, regulations, and laws pertaining thereto, and/or for obviousness-type double patenting.

59. For example, and not intended as a limitation for ARI to proffer additional defenses, the claims of the '478 patent are invalid for lack of enablement. The '478 patent fails to describe and enable the claimed solution. Plaintiffs allege that the claimed invention achieves more stability at the desired pH, over the prior art formulations, to treat post-cardiotomy shock and sepsis. However, the '478 patent fails to describe or demonstrate possession of any methods

beyond those listed in the prior art although modifications to the process could incrementally impact the overall purity and stability of the finished dosage form.

60. The specification of the '478 patent fails to describe any improvements in chemical synthesis of arginine vasopressin over the prior art. The '478 patent fails to describe any improvements of the purification methods for the finished dosage form to reduce impurities over the prior art. The '478 patent does not describe any improvements on the storage conditions for peptides over the prior art. Because of these omissions, the '478 patent is invalid for lack of enablement.

61. ARI is entitled to a declaratory judgment that each of the claims of the '478 patent is invalid for failure to comply with one or more requirements of 35 U.S.C. §§ 101, 102, 103, or 112 and the rules, regulations, and laws pertaining thereto, and/or for obviousness-type double patenting.

62. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities as the Court deems applicable.

SEVENTH COUNTERCLAIM:

DECLARATORY JUDGMENT OF INVALIDITY OF THE '526 PATENT

63. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

64. Each of the claims of the '526 patent is invalid for failure to comply with one or more requirements of 35 U.S.C. §§ 101, 102, 103, or 112 and the rules, regulations, and laws pertaining thereto, and/or for obviousness-type double patenting.

65. For example, and not intended as a limitation for ARI to proffer additional defenses, the claims of the '526 patent are invalid for lack of enablement. The '526 patent fails to describe and enable the claimed solution. Plaintiffs allege that the claimed invention achieves more stability at the desired pH, over the prior art formulations, to treat post-cardiotomy shock and sepsis. However, the '526 patent fails to describe or demonstrate possession of any methods beyond those listed in the prior although modifications to the process could incrementally impact the overall purity and stability of the finished dosage form.

66. The specification of the '526 patent fails to describe any improvements in chemical synthesis of arginine vasopressin over the prior art. The'526 patent fails to describe any improvements of the purification methods for the finished dosage form to reduce impurities over the prior art. The '526 patent does not describe any improvements on the storage conditions for peptides over the prior art. Because of these omissions, the '526 patent is invalid for lack of enablement.

67. ARI is entitled to a declaratory judgment that each of the claims of the '526 patent is invalid for failure to comply with one or more requirements of 35 U.S.C. §§ 101, 102, 103, or 112 and the rules, regulations, and laws pertaining thereto, and/or for obviousness-type double patenting.

68. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities as the Court deems applicable.

EIGHTH COUNTERCLAIM:
DECLARATORY JUDGMENT OF INVALIDITY OF THE '209 PATENT

69. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

70. Each of the claims of the ’209 patent is invalid for failure to comply with one or more requirements of 35 U.S.C. §§ 101, 102, 103, or 112 and the rules, regulations, and laws pertaining thereto, and/or for obviousness-type double patenting.

71. For example, and not intended as a limitation for ARI to proffer additional defenses, the claims of the ’209 patent are invalid for lack of enablement. The ’209 patent fails to describe and enable the claimed solution. Plaintiffs allege that the claimed invention achieves more stability at the desired pH, over the prior art formulations, to treat post-cardiotomy shock and sepsis. However, the ’209 patent fails to describe or demonstrate possession of any methods beyond those listed in the prior although modifications to the process could incrementally impact the overall purity and stability of the finished dosage form.

72. The specification of the ’209 patent fails to describe any improvements in chemical synthesis of arginine vasopressin over the prior art. The’209 patent fails to describe any improvements of the purification methods for the finished dosage form to reduce impurities over the prior art. The ’209 patent does not describe any improvements on the storage conditions for peptides over the prior art. Because of these omissions, the ’209 patent is invalid for lack of enablement.

73. ARI is entitled to a declaratory judgment that each of the claims of the ’209 patent is invalid for failure to comply with one or more requirements of 35 U.S.C. §§ 101, 102, 103, or 112 and the rules, regulations, and laws pertaining thereto, and/or for obviousness-type double patenting.

74. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities as the Court deems applicable.

NINTH COUNTERCLAIM:

DECLARATORY JUDGMENT OF INVALIDITY OF THE '785 PATENT

75. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

76. Each of the claims of the '785 patent is invalid for failure to comply with one or more requirements of 35 U.S.C. §§ 101, 102, 103, or 112 and the rules, regulations, and laws pertaining thereto, and/or for obviousness-type double patenting.

77. For example, and not intended as a limitation for ARI to proffer additional defenses, the claims of the '785 patent are invalid for lack of enablement. The '785 patent fails to describe and enable the claimed solution. Plaintiffs allege that the claimed invention achieves more stability at the desired pH, over the prior art formulations, to treat post-cardiotomy shock and sepsis. However, the '785 patent fails to describe or demonstrate possession of any methods beyond those listed in the prior although modifications to the process could incrementally impact the overall purity and stability of the finished dosage form.

78. The specification of the '785 patent fails to describe any improvements in chemical synthesis of arginine vasopressin over the prior art. The'785 patent fails to describe any improvements of the purification methods for the finished dosage form to reduce impurities over the prior art. The '785 patent does not describe any improvements on the storage conditions for

peptides over the prior art. Because of these omissions, the '785 patent is invalid for lack of enablement.

79. ARI is entitled to a declaratory judgment that each of the claims of the '785 patent is invalid for failure to comply with one or more requirements of 35 U.S.C. §§ 101, 102, 103, or 112 and the rules, regulations, and laws pertaining thereto, and/or for obviousness-type double patenting.

80. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities as the Court deems applicable.

TENTH COUNTERCLAIM:

DECLARATORY JUDGMENT OF UNENFORCEABILITY OF THE '478 PATENT, THE '526 PATENT, THE '209 PATENT, THE '239 PATENT, AND THE '785 PATENT BASED ON INEQUITABLE CONDUCT AND UNCLEAN HANDS

81. ARI re-alleges and incorporates herein by reference the allegations contained in the foregoing paragraphs of its Answer and Counterclaims.

82. Plaintiffs, their attorneys, or the named inventors of the '478 patent, the '526 patent, the '209 patent, the '239 patent, and the '785 patent never disclosed that the prior art Pitressin® product marketed by Plaintiffs' predecessors, Parke-Davis and/or JHP Pharmaceuticals ("JHP") had a pH of 3.6 as evidenced by FDA's Biopharmaceutics Review for the Pitressin® product, which Plaintiffs submitted to the FDA on September 12, 2012 and the FDA signed on November 8, 2012.

83. Plaintiffs, their attorneys, and/or the named inventors of the '478 patent, the '526 patent, the '209 patent, the '239 patent, and the '785 patent were aware that Pitressin®'s pH

was 3.6. In connection, with seeking approval of its VASOSTRICT® product, Plaintiffs submitted an NDA that compared VASOSTRICT® with Pitressin®, and specifically, Plaintiffs submitted to the FDA the Biopharmaceutics Review, which contained the pH of the Pitressin® product. Moreover, Plaintiffs were also aware of the pH of the Pitressin® product because Pitressin® was sold by JHP, Plaintiffs' predecessors in interest. Plaintiffs, their attorneys, and/or the named inventors of the'478 patent, the '526 patent, the '209 patent, the '239 patent, and the '785 patent had a duty to disclose the Pitressin® product, the Pitressin® product's label, and the Pitressin® product's pH to the PTO.

84. Plaintiffs' omission was material because Plaintiffs argued throughout prosecution of the patents-in-suit that the pH of the claimed formulation was critical to patentability over the prior art. For example, Plaintiffs sought its first set of claims directed to a pH range of 3.5-4.1, a range that overlapped with the prior art pH of 3.6. Without calling to the attention of the Examiner that Pitressin® had been sold at a pH of 3.6 by its predecessors, Plaintiffs and its attorney made statements regarding the criticality of the claimed pH range compared to the prior art range of pH 2.5-4.5 that misled the Examiner into allowing its claims.

85. Rather than alerting the Examiner to the prior art, named inventors Kannan and Kenney submitted declarations that focused on the stability of the formulations in pH ranges and/or acknowledged the criticality of these ranges. Kannan stated in his Declaration at ¶¶ 2, 18: "As I understand, the pending claims are rejected as allegedly being obvious over ... Pharmaceutical Partners of Canada Inc. . . . As I understand, the claims submitted herewith cover a vasopressin formulation at a pH of 3.5 to 4.1. The claimed pH range of 3.5 to 4.1 reflects the good stability of vasopressin provided at pH 3.5 to 4.1 at both temperatures tested, as shown in

Figures 5-6." Moreover, in his Declaration at ¶ 15, Vandse III stated: "The criticality of pH 3.8 in stabilizing vasopressin, while providing the lowest amount of impurities, is not evident from the disclosures from [the prior art] or Treschan because Treschan does not disclose a pH for vasopressin storage, and [the prior art] provides no guidance for the selection of a specific pH from the disclosed range of pH 2.5-4.5."

86. The Examiner relied on Plaintiffs' inventor declarations when granting the patents-in-suit. *See* '239 Patent Pros. Hist., Notice of Allowance at 2; '526 Patent Pros. Hist., Notice of Allowance at 2. Plaintiff's omission was material because the Examiner would not have allowed claims at or near the those disclosed in the prior art.

87. The materiality of Plaintiffs' omission of pH and the FDA's Biopharmaceutics Review during prosecution of the asserted patents was again demonstrated in a related, but later-filed patent application. In that related application, Plaintiffs disclosed FDA's Biopharmaceutics Review, after the issuance of the patents-in-suit, only after Eagle Pharmaceuticals, Inc. cited the reference in a Paragraph IV Certification letter. *See* U.S. Appl. No. 15/864597 Pros. Hist., 6/6/2018 IDS at 2; U.S. Appl. No. 15/864593 Pros. Hist., 6/26/2018 IDS at 2. Based on that disclosure, the Examiner cited the FDA's Biopharmaceutics Review as the basis for obviousness rejections in twelve pending applications related to the patents-in-suit.[1]

[1] *See* U.S. Appl. No. 16/044,056 Pros. Hist., 9/18/18 Non-Final Rejection at 22-23; U.S. Appl. No. 16/044,062, 9/18/18 Non-Final Rejection at 19-21; U.S. Appl. No. 16/044,075 Pros. Hist., Non-Final Rejection at 19-21; U.S. Appl. No. 16/044,078 Pros. Hist., 9/18/18 Non-Final Rejection at 19-21; U.S. Appl. No. 16/044,082 Pros. Hist., 9/21/18 Non-Final Rejection at 24-25; U.S. Appl. No. 16/044,090 Pros. Hist., 9/21/18 Non-Final Rejection

88. The Examiner stated that "the Biopharmaceutics Review [of the Pitressin® product] establishes that the formulation [which was] publically available prior to September 26, 2012 contains 20 U/mL vasopressin, chlorobutanol, acetic acid, and water, and has a pH of about 3.6." E.g., U.S. Appl. No. 16/044,056 Pros. Hist., September, 18, 2018 Non-Final Rejection at 22-23.

89. Plaintiffs did not contest the rejections in the twelve pending applications and abandoned the twelve pending applications in view of the Examiner's Non-Final Rejections.

90. Based on the Plaintiffs' conduct, one can infer that Plaintiffs withheld this material with the intent to mislead the PTO. First, in seeking FDA approval of VASOSTRICT®, Plaintiffs compared VASOSTRICT® and Pitressin®. Second, at least inventors Kannan and Kenney contributed to the alleged invention of the asserted patents and the material that was submitted to FDA as part of the approval process for VASOSTRICT®. Specifically, in prosecution of the '239 patent, Kannan argued that the 2014 VASOSTRICT® label could not be prior art because it reflected his and Kenney's own work.

91. It is reasonable to then assume that as scientists working to develop an allegedly more stable version of a product that had been on the market for decades, those scientists—Kannan and Kenney—knew the pH of the Pitressin® product, which formed the

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at 23-25; U.S. Appl. No. 16/044,093 Pros. Hist., 9/21/18 Non-Final Rejection at 23-25; U.S. Appl. No. 16/044,100 Pros. Hist., 9/21 /18 Non-Final Rejection at 23-25; U.S. Appl. No. 16/044,1 05 Pros. Hist., 9/19/18 Non-Final Rejection at 31-32; U.S. Appl. No. 16/044,113 Pros. Hist., 9/19/18 Non-Final Rejection at 27-28; U.S. Appl. No. 16/044,117 Pros. Hist., 9/19/18 at 27-29; U.S. Appl. No. 16/044,125 Pros. Hist., 9/19/18 Non-Final Rejection at 28-29.

basis of their approval for VASOSTRICT®. Failure to disclosure the pH to the PTO despite this knowledge was material, misleading, and could only have been done with an intent to deceive the PTO.

92. As a result of Plaintiffs' conduct, each of the patents-in-suit is unenforceable for inequitable conduct or unclean hands.

93. ARI is entitled to a judicial declaration that each of the claims of the patents-in-suit is unenforceable due to the conduct of Plaintiffs, the named inventors of the patents-in-suit, and/or the prosecuting attorneys of the patents-in-suit for inequitable conduct or unclean hands.

94. ARI is entitled to an award of costs and expenses, including reasonable attorney fees, to be assessed against Plaintiffs in accordance with the provisions of 35 U.S.C. § 285 or such other authorities that the Court deems applicable.

PRAYER FOR RELIEF

WHEREFORE, ARI requests that the Court enter judgment in its favor against Plaintiffs/Counterclaim-Defendants as follows:

a) Dismissing with prejudice the entirety of Counterclaim Defendants' Complaint;

b) Denying all remedies and relief sought by Counterclaim Defendants in the Complaint;

c) Declaring that the manufacture, use, sale, offer for sale, or importation of the vasopressin product described in ARI's NDA No. 212592 has not and will not infringe, literally or under the doctrine of equivalents, any valid claim of the '785 patent;

d) Declaring that each and every asserted claim of the ’785 patent is invalid;

e) Declaring that the manufacture, use, sale, offer for sale, or importation of the vasopressin product described in ARI’s NDA No. 212592 has not and will not infringe, literally or under the doctrine of equivalents, any valid claim of the ’209 patent;

f) Declaring that each and every asserted claim of the ’209 patent is invalid;

g) Declaring that the manufacture, use, sale, offer for sale, or importation of the vasopressin product described in ARI’s NDA No. 212592 has not and will not infringe, literally or under the doctrine of equivalents, any valid claim of the ’478 patent;

h) Declaring that each and every asserted claim of the ’478 patent is invalid;

i) Declaring that the manufacture, use, sale, offer for sale, or importation of the vasopressin product described in ARI’s NDA No. 212592 has not and will not infringe, literally or under the doctrine of equivalents, any valid claim of the ’526 patent;

j) Declaring that each and every asserted claim of the ’526 patent is invalid;

k) Declaring that the manufacture, use, sale, offer for sale, or importation of the vasopressin product described in ARI’s NDA No. 212592 has not and will not infringe, literally or under the doctrine of equivalents, any valid claim of the ’239 patent;

l) Declaring that each and every claim of the ’478 patent, the ’526 patent, the ’209 patent, the ’239 patent, and the ’785 patent are unenforceable due to inequitable conduct;

m) Declaring that each and every claim of the ’478 patent, the ’526 patent, the ’209 patent, the ’239 patent, and the ’785 patent are unenforceable due to unclean hands;

n) Finding this to be an exceptional case and awarding ARI reasonable attorney fees and costs under 35 U.S.C. § 285; and all other applicable statutes and rules in common law that would be appropriate, with pre- and post-judgment interest thereon; and

o) Granting such other relief as this Court may deem just and proper.

Dated: August 30, 2019

Stamoulis & Weinblatt LLC

/s/ Stamatios Stamoulis

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